



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/744,946	02/08/2001	Yves Malecot	5418	6110

7590 01/05/2004

Mary J Breiner
Breiner & Breiner
115 North Henry Street
PO Box 19290
Alexandria, VA 22320-0290

EXAMINER

OCAMPO, MARIANNE S

ART UNIT	PAPER NUMBER
----------	--------------

1723

DATE MAILED: 01/05/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/744,946

Applicant(s)

MALECOT ET AL.

Examiner

Marianne S. Ocampo

Art Unit

1723

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 October 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is continued in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 13-23 and 25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 13-23 and 25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10-1-03 (fig. 1) is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Agreement may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ b) ☐ Some * c) ☐ None of:
- 1) Certified copies of the priority documents have been received.
- 2) Certified copies of the priority documents have been received in Application No. _____.
- 3) Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 13) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.75.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Information

- ☐ Publication of International Search Report (PTO-892)
- ☐ Notice of Drafting Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____

- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Drawings

1. The proposed drawing correction of Figure 1, were received on 10-1-03. The drawing has been approved.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 13 - 15, 18 - 21 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki (US 4,454,036) in view of Harvuot (US 2,512,797).

4. With regards to claim 13, Suzuki discloses a filter element (1) which is capable of use in filtering a fluid (such as oil) in a filter system, the filter element comprising:
a cylindrical case (8) and,

Art Unit: 1723

• an *absorbent* (this term has been defined by examiner to be capable of absorbing/removing water and filtering fine particles) tissue paper material (1a) in sheet form compactly wound to form inner winding turns therein and to constitute a tubular cylinder inside the cylindrical case (8) in a manner to partition an outer radial part from an inner radial part (bounded by member 1b), wherein the fluid is able to move across the filter element (1) in a substantially centripetal direction (i.e. radially across towards the center of the element 1), as in figs. 1 – 2 and cols. 2 – 5.

Suzuki fails to disclose the filter element being devoid of a central core and the inner windings exhibiting a contour which prevents the inner windings turns from unraveling inward.

5. Harvuot teaches a filter element, similar to that of Suzuki, which is formed of a water absorbent (cellulose) paper in sheet form compactly wound to form inner winding turns and form into a tubular cylinder (1) wherein the filter element is devoid of a central core and the inner winding turns exhibiting a cylindrical contour (shape) and having a loose end thereof which is being wetted to provide a sticky strip to wind and to join to itself to form a joint, which prevents the inner winding turns from unraveling inward, as in cols. 1 – 2.

It is considered obvious to one of ordinary skill in the art at the time of the invention to modify the filter element of Suzuki by substituting the filter medium (1, not including the casing) of Suzuki, in lieu of the coreless filter element (1) taught by Harvuot, in order to provide an alternative but as effective filtering element for the filtration of fluids (such as oil, gasoline; etc), which is more inexpensive to manufacture and easily discarded compared to those conventional (with a central core/tube/rod) filter elements. The coreless filter element of Harvuot is also more

biodegradable (since it is only made of paper and there is no central core/tube/rod which is usually made of a perforated metal or plastic material), and less expensive to manufacture since there would be no costs for a central tube/cardboard/rod/core necessary to make them.

6. Concerning claims 14 - 15, Susuki, as modified by Harvout, has taught the limitations of claim 13 above. Harvuot further teaches the tubular cylinder (1) having a mean inside diameter greater than $1/20$ of a mean outside diameter of the tubular cylinder (claim 14) and the mean inside diameter being greater than $1/4$ of the mean outside diameter (claim 15), in particular, the mean inside diameter of the cylinder (1) is approximately $1/4$ of the mean outside diameter of the cylinder (1), as in figs. 1 - 2.

It is considered obvious to one of ordinary skill in the art at the time of the invention to form the mean inside diameter of the tubular cylinder to have a value which is sufficient to effectively filter and absorb unwanted constituents of a fluid, without collapsing, which when optimized could be in a range of values greater than $1/20$ of the mean outside diameter, and/or have a value greater than $1/4$ of the mean outside diameter. The case law, *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980) has provided that "The discovery of an optimum value of a result effective variable in a known process is ordinarily within the skill of the art, and thus a prima facie case of obviousness is established."

In this instance, the optimum value of the mean inside diameter (i.e. result effective variable in this particular endeavor) is in the range of values greater than $1/20$ of the mean outside diameter, or greater than $1/4$ of the mean outside diameter, where the tubular cylinder is

considered effective and dimensionally stable to handle filtration conditions (i.e. pressure drops and clogging).

7. With regards to claim 18, Suzuki as modified by Harvuot, has taught the limitations of claim 13 above. Harvuot also teaches the tubular cylinder having an inside wall which is cylindrical and has a circular cross-sectional shape, as in figs. 1 – 2 of Harvuot. The case law, *In re Dailey*, 357 F.2d 669, 149 USPQ 47 (CCPA 1966), provided (The court held) that the configuration of the claimed invention such as a disposable plastic nursing container (in this instance, the tubular cylinder forming the filter element) was a matter of choice which a person of ordinary skill in the art would have found obvious absent persuasive evidence that the particular configuration (i.e. cylindrical and/or conical inside wall and a circular/polygonal cross-sectional shape) of the claimed invention was significant.

8. Concerning claim 19, Suzuki as modified by Harvuot, has taught the limitations of claim 13 above. Suzuki also discloses the filter element further comprising at least one polarizing positioning means, in the form of a cap (6) and spring (7), which can serve to position the filter element (1) in a manner that the filter element (1) assumes a defined position within the case (8), as in fig. 2.

9. Regarding claim 20, Suzuki as modified by Harvuot, has taught the limitations of claim 13 above. Suzuki, as modified by Harvuot, further teach the absorbent paper material

being a strip which is a continuous single sheet wound to provide the tubular cylinder, as in col. 2 of Suzuki and/or cols. 1 – 2 of Harvuot.

10. Suzuki as modified by Harvuot, has taught the limitations of claim 13 above. Claim 21 is considered a product by process claim. The patentability of a product (i.e. the filter element formed by the absorbent paper formed into a tubular cylinder) by process claim is based upon the product itself, even though the claim is limited and defined by process (i.e. the absorbent paper being formed or comprised of series of sheets interlaced to form the tubular cylinder), and therefore, the product in such a claim is unpatentable if it is the same as, or obvious from the product of the prior art, even if the product of the prior art had been made by a different process. See *In re Thorpe, et al.*, No. 85-1913 (11-21-85) 227 USPQ pages 964 – 966. Here, the examiner considered the absorbent paper cylinder (toilet paper roll) formed by a series of sheets interlaced rolled or wound into a tubular cylinder is an obvious variant of the absorbent paper cylinder formed by a continuous sheet of toilet paper material taught by the prior art, Suzuki as modified by Harvuot above.

11. With respect to claim 25, it is unclear if the applicants wish to include as the claimed invention a filter system in combination with the filter element claimed in claim 13, or not. It is also unclear what structural features or limitations are being added by claim 25, or does it merely add its intended use. For examination purposes, the examiner has considered this claim to be claiming a combination of the filter system and the filter element in claim 13. Suzuki also

discloses the filter system being constructed and arranged to filter automotive (motor car) engine oil, in particular, lubricating oils, as in cols. 1 - 2 of Suzuki.

12. Alternatively, claims 13 - 21 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki (US 4,454,036) in view of Harvuot (US 2,512,797) and Kobayashi (US 4,487,378).

13. With regards to claim 13, the examiner has considered the claimed invention to be a subcombination of a filter element which includes a filter medium comprising an absorbent tissue paper wound compactly into a tubular cylinder and a cylindrical casing, and not including a filter system.

14. Suzuki discloses a filter element (1) for filtering a fluid (such as oil) in a filter system, comprising:

- a cylindrical case (8) and,

- an *absorbent* (this term has been defined by examiner to be capable of absorbing/removing water and filtering fine particles) tissue paper material (1a) in sheet form compactly wound to form inner winding turns therein and to constitute a tubular cylinder inside the cylindrical case (8) in a manner to partition an outer radial part from an inner radial part (bounded by member 1b), wherein the fluid is able to move across the filter element (1) in a substantially centripetal direction (i.e. radially across towards the center of the element 1), as in figs.1 - 2 and cols. 2 - 5.

Suzuki fails to disclose the filter element being devoid of a central core and the inner windings exhibiting a contour which prevents the inner windings turns from unraveling inward.

15. Harvuot teaches a filter element, similar to that of Suzuki, formed of a water absorbent cellulose paper in sheet form compactly wound to form inner winding turns and form into a tubular cylinder (1) wherein the filter element is devoid of a central core and the inner winding turns exhibiting a cylindrical contour (shape) and having a loose end thereof which is being wetted to provide a sticky strip to wind and to join to itself to form a joint, which prevents the inner winding turns from unraveling inward, as in cols. 1 – 2.

It is considered obvious to one of ordinary skill in the art at the time of the invention to modify the filter element of Suzuki by substituting the filter medium (1, not including the casing) of Suzuki, in lieu of the coreless filter element (1) taught by Harvuot, in order to provide an alternative but as effective filtering element for the filtration of fluids (such as oil, gasolines, etc), which is more inexpensive to manufacture and easily discarded compared to those conventional (with a central core/tube/rod) filter elements. The coreless filter element of Harvuot is also more biodegradable (since it is only made of paper and there is no central core/tube/rod which is usually made of a perforated metal or plastic material), and less expensive to manufacture since there would be no costs for a central tube/cardboard/rod/core necessary to make them.

16. In this rejection, if the term/limitation “**contour**” which prevents inner winding turns from unraveling inward” in claim 13, is being limited to a particular shape, according to the specification, found in the last 6 lines of page 6, which is *constituted by convex surface segments*

joined by turning points having folding marks (i.e. star-shaped cross-section as in fig. 2 of the disclosure), Suzuki as modified by Harvot fail to teach such a contour (i.e. constituted by convex surface segments joined by turning points having folding marks, i.e. star-shaped cross-section).

16. Kobayashi teach a similar coreless tissue paper roll element which is capable of being used as a filter element, which is formed by winding compactly toilet/tissue paper to form inner winding turns (such as shown in figs. 4, 7 - 8 & 17) therein to form a tubular cylinder wherein the tubular cylinder is also devoid of a central core, similar to the filter element of Suzuki as modified by Harvot, and the inner winding turns exhibiting a contour which prevents the inner winding turns from unraveling inward and in addition to having a loose end being wetted with an adhesive to form a joint with an inner winding turn thereof, as in cols. 1 - 8.

It is considered obvious to one of ordinary skill in the art to modify the filter element formed of toilet/tissue paper (i.e. tubular cylinder of toilet paper) of Suzuki as modified by Harvot, by substituting it in lieu of one taught by Kobayashi, in order to provide an alternative and improved design/configuration for the coreless filter element which has a center hole (formed by the contour) which is rigid and safe from collapse, as in the abstract of Kobayashi.

17. Concerning claims 14 - 15, Susuki, as modified by Harvot and Kobayashi, has taught the limitations of claim 13 above. Harvot further teaches the tubular cylinder (1) having a mean inside diameter greater than 1/20 of a mean outside diameter of the tubular cylinder (claim 14) and the mean inside diameter being greater than 1/4 of the mean outside diameter

(claim 15), in particular, the mean inside diameter of the cylinder (1) is approximately $\frac{1}{4}$ of the mean outside diameter of the cylinder (1), as in figs. 1 – 2.

It is considered obvious to one of ordinary skill in the art at the time of the invention to form the mean inside diameter of the tubular cylinder to have a value which is sufficient to effectively filter and absorb unwanted constituents of a fluid, without collapsing, which when optimized could be in a range of values greater than $\frac{1}{20}$ of the mean outside diameter, and/or have a value greater than $\frac{1}{4}$ of the mean outside diameter. The case law, *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980) has provided that "The discovery of an optimum value of a result effective variable in a known process is ordinarily within the skill of the art, and thus a prima facie case of obviousness is established."

In this instance, the optimum value of the mean inside diameter (i.e. result effective variable in this particular endeavor) is in the range of values greater than $\frac{1}{20}$ of the mean outside diameter, or greater than $\frac{1}{4}$ of the mean outside diameter, where the tubular cylinder is considered effective and dimensionally stable to handle filtration conditions (i.e. pressure drops and clogging).

15. Concerning claim 16, Suzuki as modified by Harvuot and Kobayashi, has taught the limitations of claim 15 above. Suzuki as modified by Harvuot and Kobayashi, also teach the tubular cylinder having a mean inside diameter being greater than $\frac{1}{4}$ the mean outside diameter, being between $\frac{1}{3}$ and $\frac{1}{2}$ the mean outside diameter, in the embodiment shown in Fig. 17 of Kobayashi. It is considered obvious to one of ordinary skill in the art that the value for the mean

inside diameter of the filter element/paper roll would be a result effective variable, dependent upon the degree of strength of the windings for preventing collapse or unraveling inward, as well as the amount (number) of windings to form the tubular cylinder which is dependent upon the amount/number of layers needed to perform the filtration and achieve desired purity/cleanliness of the fluid being filtered.

19. With respect to claim 17, Suzuki as modified by Harvuot and Kobayashi, has taught the limitations of claims 13, 14, 15 or 16 above. Suzuki as modified by Harvuot and Kobayashi, further teach the mean inside diameter of the cylinder could be formed such that it is greater than 25 mm, as in col. 10, lines 52 -- 54 of Kobayashi. The same motivation used in claim 16 above is applied here.

20. With regards to claim 18, Suzuki as modified by Harvuot and Kobayashi, has taught the limitations of claim 13 above. Suzuki as modified by Harvuot, also teach the tubular cylinder having an inside wall which is cylindrical and has a circular cross-sectional shape, as in figs. 1 - 2 of Harvuot. The case law, In re Dailey, 357 F.2d 669, 149 USPQ 47 (CCPA 1966), provided (The court held) that the configuration of the claimed invention such as a disposable plastic nursing container (in this instance, the tubular cylinder forming the filter element) was a matter of choice which a person of ordinary skill in the art would have found obvious absent persuasive evidence that the particular configuration (i.e. cylindrical and/or conical inside wall and a circular/polygonal cross-sectional shape) of the claimed invention was significant.

21. Concerning claim 19, Suzuki as modified by Harvuot and Kobayashi, has taught the limitations of claim 13 above. Suzuki also discloses the filter element further comprising at least one polarizing positioning means, in the form of a cap (6) and spring (7), which can serve to position the filter element (1) in a manner that the filter element (1) assumes a defined position within the case (8), as in fig. 2.

22. Regarding claim 20, Suzuki as modified by Harvuot and Kobayashi, has taught the limitations of claim 13 above. Suzuki, as modified by Harvuot, further teach the absorbent paper material being a strip which is a continuous single sheet wound to provide the tubular cylinder, as in col. 2 of Suzuki and/or cols. 1 – 2 of Harvuot.

23. Suzuki as modified by Harvuot and Kobayashi, has taught the limitations of claim 13 above. Claim 13 is considered a product by process claim. The patentability of a product (i.e. the filter element formed by the absorbent paper formed into a tubular cylinder) by process claim is based upon the product itself, even though the claim is limited and defined by process (i.e. the absorbent paper being formed or comprised of series of sheets interlaced to form the tubular cylinder), and therefore, the product in such a claim is unpatentable if it is the same as, or obvious from the product of the prior art, even if the product of the prior art had been made by a different process. See In re Thorpe, et al., No. 85-1913 (11-21-85) 227 USPQ pages 964 – 966. Here, the examiner considered the absorbent paper cylinder (toilet paper roll) formed by a series

of sheets interlaced rolled or wound into a tubular cylinder is an obvious variant of the absorbent paper cylinder formed by a continuous sheet of toilet paper material taught by the prior art, Suzuki as modified by Harvuot and Kobayashi above.

24. With respect to claim 25, Suzuki as modified by Harvuot and Kobayashi, has taught the limitations of claim 13 above. it is unclear if the applicants wish to include as the claimed invention a filter system in combination with the filter element claimed in claim 13, or not. For examination purposes, the examiner has considered this claim to be claiming a combination of the filter system and the filter element in claim 13. Suzuki also discloses the filter system being constructed and arranged to filter automotive (motor car) engine oil, in particular, lubricating oils, as in cols. 1 - 2 of Suzuki.

25. Claims 22 and 23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki, Harvuot and Kobayashi, as applied to claim 13 or 20 and 21 respectively above, and further in view of Whiteside (GB 2,150,456).

26. Regarding claim 22, Suzuki as modified by Harvuot and Kobayashi, has taught the limitations of claim 13 or 20 above. Suzuki as modified by Harvuot and Kobayashi, fail to teach the sheet of absorbent tissue paper material comprising *several plies* (defined here to mean "at least two or more than one ply").

27. Whiteside teaches a similar filter element comprising at least a sheet of an absorbent *two-ply* tissue paper being wound into a roll/tubular cylinder to form the filter element, as in page 1. It is considered obvious to one of ordinary skill in the art to modify the sheet of toilet/tissue paper material of Suzuki, as modified by Harvuot and Kobayashi such that each sheet has several plies (at least two plies) of tissue paper, in order to provide a stronger tissue paper which can withstand greater pressure and other filtration conditions in the filtration applications and also provide a greater (depth) filtration surface area.

28. Concerning claim 23, Suzuki as modified by Harvuot and Kobayashi, has taught the limitations of claim 21 above. Claim 23 is considered a product by process claim. The patentability of a product (i.e. the filter element formed by the absorbent paper formed into a tubular cylinder) by process claim is based upon the product itself, even though the claim is limited and defined by process (i.e. the absorbent paper being formed or **comprised of series of sheets interlaced to form the tubular cylinder**), and therefore, the product in such a claim is unpatentable if it is the same as, or obvious from the product of the prior art, even if the product of the prior art had been made by a different process. See *In re Thorpe, et al., No. 85-1913 (11-21-85) 227 USPQ pages 964 -- 966*. Here, the examiner considered the absorbent paper cylinder (toilet paper roll) formed by a series of sheets interlaced rolled or wound into a tubular cylinder, wherein each sheet is comprised of several plies, is an obvious variant of the absorbent paper cylinder formed by a continuous sheet of toilet paper material rolled into a tubular filter element

(in claim 22), taught by the prior art, Suzuki as modified by Harvout, Kobayashi and Whiteside above.

Response to Arguments

29. Applicant's arguments filed on 10-1-03, with respect to claims 13 – 23 and 25 have been considered but they are not persuasive. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). In response to the type of paper that Harvout teaches (i.e. paper impregnated with resin), this is considered not relevant or immaterial, since the type of paper (i.e. water absorbent tissue paper) is already taught by the primary reference, Suzuki, and the combination of both teachings of Suzuki and Harvout, would produce a coreless filter element which could have the material of construction taught by Suzuki. Regarding the addition of the third prior art, Whiteside, it is not necessary to show that Whiteside must have a coreless filter element, since Harvout already shown this feature, and Whiteside was added in order to show that filter elements are known in the art to be formed of two ply tissue paper.

30. In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on

obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

31. Since the same prior art and rejections are made in this office action, **THIS ACTION IS MADE FINAL**. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Art Unit: 1723

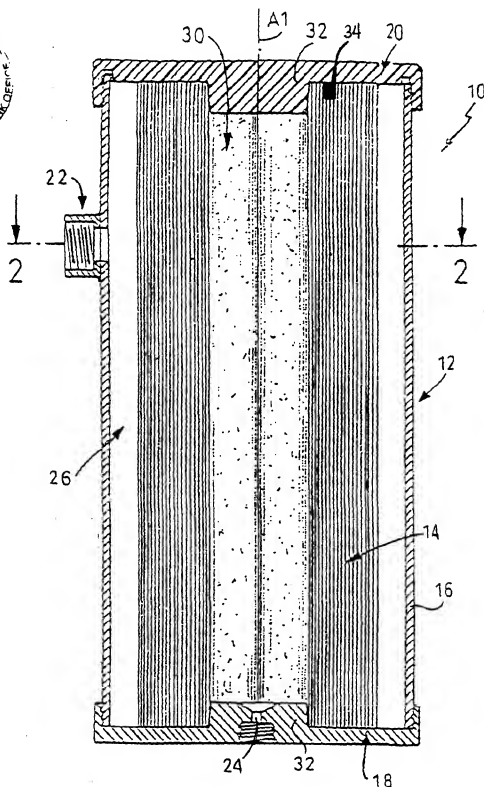
Conclusion

32. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Marianne S. Ocampo whose telephone number is (571) 272-1144. The examiner can normally be reached on Tuesdays and Thursdays to Fridays from 8:00 A.M. to 4:30 P.M..

33. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wanda Walker can be reached on (571) 272-1151. The fax phone number for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and After Final communications.

M.S.O.


W. L. WALKER
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 1700

FIG. 1

notes Mo
12/22/63